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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,407	04/08/2004	Steven A. Johnson	21763.NP	8433
20551 7590 06/30/2008 THORPE NORTH & WESTERN, LLP. P.O. Box 1219 SANDY, UT 84091-1219				
EXAMINER				
LEACH, CRYSTAL I				
ART UNIT		PAPER NUMBER		
3737				
MAIL DATE		DELIVERY MODE		
06/30/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/821,407

**Applicant(s)**

JOHNSON ET AL.

**Examiner**

CRYSTAL I. LEACH

**Art Unit**

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-84 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-84 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/ISD)  
Paper No(s)/Mail Date 3/28/2005; 11/26/2004; 7/12/2004  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_



## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The Information Disclosure Statements (IDS) submitted on March 28, 2005, November 26, 2004 and July 12, 2004 are in compliance with 37 CFR 1.97 and 1.98. The references therein have been considered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 5, 8, 10, 11, 13, 15-19, 27, 29, 31, 32, 34, 35, 36, 41, 42-59, 61, 62, 64, 69, 77 and 78 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardineer et al. (4,282,880).

4. Regarding claims 1, 2, 4, 5, 15-19, 29, 35, 36, 41, 42-59, 61, 62, 64, 69, 72, 73 and 75-78, Gardineer et al. teach a breast scanning system (see figure 1) comprising a bath configured to contain a medium (see col. 2, l. 21-33); transducer arrays (14) configured to transmit and receive ultrasound signals (see col. 2, l. 24-30); a horizontal table, disposable over the bath and configured to receive the breast of a patient (see figure 1), wherein the table is configured to be linearly vertically displaced (see figures 1, 1a and 2). Gardineer et al. also teach structural elements of the table (see figures 1, 1a and 2).

Regarding claims 8, 27, 67 and 76, Gardineer et al. teach preconditioning tank and means for transferring liquid from the preconditioning tank to the bath (see abstract, "flexible bag" and "suspension pool"). See also col. 4, l. 24-68.

Regarding claims 10, 31 and 72, Gardineer et al. teach a de-gasser (see "de-bubbling subsystem" col. 3, l. 12-19).

Regarding claims 13, 34 and 75, Gardineer et al. teach a separate subsystem capable of injecting metered amounts of a purifying solution into the fluid in the bath, wherein the purifying solution could be, for example, chlorine (see abstract and col. 2, l. 67-col. 3, l. 2 and col. 3, l. 19-22).

Regarding claims 11, 32 and 73, Gardineer et al. teach a circulation pump (see col. 3, l. 9-15 and col. 4, l. 24-68).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 9, 12, 14, 20-26, 28, 30, 33, 37-40, 60, 63-66, 68, 70, 71, 74, 79-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardineer et al. (4,282,880) in view of Mezrich et al. (4,298,009).

Gardineer et al. teach a heater and means for determining the temperature (see col. 2, l. 67 – col. 3, l. 32 and col. 4, l. 50-55), wherein the means would serve as a functional equivalent to a thermocouple. Gardineer et al. do not teach a de-ionizer,

however, it would have been obvious to one of ordinary skill in the art to incorporate a de-ionizer in the invention of Gardineer et al., given that the invention provides means for filtering and purifying the fluid (see above rejections). It would be obvious to one of ordinary skill in the art to incorporate a pointing device in order to aid with alignment. It would also be obvious to one of ordinary skill in the art computation and data acquisition is included in the invention given that the invention teaches an ultrasonic scanning system capable of producing an image.

Gardineer et al. do not teach a motor configured to raise and lower the table.

In the same field of endeavor, Mezrich et al. teach a motor (24) configured to raise and lower a table (see col. 2, l. 64 – col. 3, l. 9). Mezrich et al. also teach a camera (37). It would be obvious to one of ordinary skill in the art that the level and/or speed at which the table is lowered and raised can be modified as determined and desired by a user for a specific patient. It would also be obvious to one of ordinary skill in the art to try utilizing a magnet system as a means for securing the breast in the bath since there are a finite number of ways in which to secure.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Gardineer et al. to include vertical adjustability, in light of the teaching of Mezrich et al., in order to improve the utility of the device.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johnson et al. (5,588,032) teach an apparatus and method for imaging with wavefields using inverse scattering techniques.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRYSTAL I. LEACH whose telephone number is (571)272-5211. The examiner can normally be reached on Monday through Friday, 8 am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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